



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,034	02/06/2004	Scott E. Hrstar	4682	7739
22474 7590 10/31/2007 CLEMENTS WALKER 1901 ROXBOROUGH ROAD SUITE 300 CHARLOTTE, NC 28211			EXAMINER SANTIAGO CORDERO, MARIVELISSE	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 10/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/774,034

Applicant(s)

HRASTAR, SCOTT E.

Examiner

Marivelisse Santiago-Cordero

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/5/07 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection. Nevertheless, in response to applicant's argument that the claims include all four of the tests in order to identify wireless devices for tracking, it is noted that the features upon which applicant relies (i.e., in order) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12, 15-16, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Challenger in view of and Zuk et al. (hereinafter "Zuk"; Pub. No.: US 2003/0154399).

Regarding claim 1, Challenger discloses a system for tracking location of a wireless device, the system comprising:

a system data store (paragraph [0027]; note the server) capable of storing indicators of one or more wireless devices to track (paragraph [0027]);

a set of one or more wireless receivers (paragraphs [0026]-[0029]; note the workstations, wireless access points, and monitoring stations);

a system processor in communication with the system data store and the set of wireless receivers (paragraphs [0026]-[0028]), wherein the system processor comprises one or more processing elements programmed or adapted to perform the steps comprising of:

(a) identifying a wireless device for tracking based upon data from the system data store (Fig. 3; paragraph [0027]);

(b) receiving data from a subset of the set of wireless receivers (paragraphs [0026]-[0029]; note the workstations, monitoring stations, and wireless access point);

(c) storing the received data in the system data store (paragraphs [0027]-[0029]);

(d) calculating the position of the identified wireless device based upon the stored data (paragraphs [0028]-[0029]); and

(e) outputting the calculated position (Fig. 3, last step; note that the stored determined location and identity are retrieved by IT management; thus, outputted).

Challenger fails to specifically disclose the system data store capable of storing one or more tracking criteria and identifying based upon a combination of dynamic operational and security assessments derived using data from the system data store, wherein the dynamic operational and security assessments identify the wireless device for tracking responsive to

behavior of the wireless device, and wherein the dynamic operational and security assessments comprise signature-based tests, protocol-based tests, anomaly-based tests, and policy deviation-based tests. Note, however, that Challenger discloses monitoring during normal business hours (paragraph [0025]); thus, suggesting tracking criteria.

Nonetheless, in the same field of endeavor, Zuk discloses the system data store capable of storing one or more tracking criteria (paragraph [0081], [0100], [0113]-[0115]) and identifying based upon a combination of dynamic operational and security assessments derived using data from the system data store (Fig. 13; paragraphs [0111], [0113]-[0115]), wherein the dynamic operational and security assessments identify the wireless device for tracking responsive to behavior of the wireless device (paragraphs [0046], [0052], [0111], [0113]-[0115]), and wherein the dynamic operational and security assessments comprise signature-based tests (Fig. 13; paragraphs [0029], [0102]-[0103], [0114]), protocol-based tests (Fig. 13; paragraphs [0029], [0032], [0100], [0113]), anomaly-based tests (Fig. 13; paragraphs [0111], [0115]), and policy deviation-based tests (Fig. 13; paragraphs [0032], [0054], [0075], [0081], [0117]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to store in the system data store of Challenger one or more tracking criteria and identifying based upon a combination of dynamic operational and security assessments derived using data from the system data store, wherein the dynamic operational and security assessments identify the wireless device for tracking responsive to behavior of the wireless device, and wherein the dynamic operational and security assessments comprise signature-based tests, protocol-based tests, anomaly-based tests, and policy deviation-based tests as suggested by Zuk for the advantages of accurately and comprehensively detecting and preventing network

security breaches by integrating multiple methods of security detection (Zuk: Abstract; paragraphs [0042], [0044], [0046], [0056]).

Regarding claim 2, in the obvious combination, Zuk discloses wherein one or more tracking criteria are of a type selected from the group consisting of time, traffic level, threat level, protocol characteristics, usage characteristics or combinations thereof (paragraphs [0100], [0111], [0114]-0115)). Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to select the one or more tracking criteria from the group consisting of time, traffic level, threat level, protocol characteristics, usage characteristics or combinations thereof as suggested by Zuk for the advantages of accurately, quickly, and comprehensively detecting and preventing network security breaches by integrating multiple methods of security detection (Zuk: Abstract; paragraphs [0042], [0044], [0046], [0056]).

Regarding claim 3, in the obvious combination, Zuk discloses wherein the one or more processing elements of the system processor are further programmed or adapted to perform the step comprising of dynamically determining one or more tracking criteria (paragraphs [0100], [0111], [0113]-[0115]). Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to dynamically determine one or more tracking criteria as suggested by Zuk for the advantages of accurately, quickly, and comprehensively detecting and preventing network security breaches by integrating multiple methods of security detection (Zuk: Abstract; paragraphs [0042], [0044], [0046], [0056]).

Regarding claim 4, in the obvious combination, Challenger discloses wherein the one or more processing elements of the system processor are further programmed or adapted to perform the step comprising of (f) repeat steps (a) through (e) continuously (paragraph [0025]; note that

the steps may be performed periodically as distinguished from continuously; however, it is not excluding it from being continuously performed. Thus, Challenger suggests that the steps (a) through (e) can be performed continuously).

Regarding claim 5, in the obvious combination, Challenger discloses wherein the one or more processing elements of the system processor are further programmed or adapted to perform the step comprising of (f) repeat steps (a) through (e) periodically (paragraph [0025]).

Regarding claim 6, in the obvious combination, Challenger discloses wherein the one or more processing elements of the system processor are further programmed or adapted to perform the step comprising of (g) modifying the period of repetition of step (f) (paragraph [0030]), but fail to specifically disclose based upon one or more tracking criteria. However, Challenger does disclose monitoring once an hour or once a day during normal business hours so as to avoid imposing an excessive burden on other uses of the devices; thus suggesting based upon one or more tracking criteria. Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to (g) modifying the period of repetition of step (f) based upon one or more tracking criteria as suggested for the advantages of avoiding imposing an excessive burden on other uses of the devices (Challenger: paragraph [0030]).

Regarding claim 7, the limitations are rejected with the same grounds and for the same reasons stated above for claim 2.

Regarding claim 8, in the obvious combination, Challenger discloses wherein the programming or adaptation to identify the wireless device includes programming or adaptation to perform the step comprising of selecting the identified wireless device based upon indicators of one or more wireless devices in the system data store (Fig. 3; paragraph [0027]).

Regarding claim 9, in the obvious combination, Challenger discloses wherein the one or more processing elements are further programmed or adapted to perform the step comprising of (f) detecting an unauthorized wireless device (Fig. 3; paragraph [0027]) and (g) storing an indicator of the unauthorized wireless device in the system data store (Fig. 3, last step; paragraph [0027]).

Regarding claim 10, in the obvious combination, Challenger discloses wherein the identified wireless device is the unauthorized wireless device (Fig. 3; paragraph [0027]).

Regarding claim 11, in the obvious combination, Challenger discloses wherein the programming or adaptation to identify the wireless device includes further programming or adaptation to perform the step comprising of retrieving indicators of one or more wireless devices from the system data store (Fig. 3; paragraph [0027]).

Regarding claim 12, in the obvious combination, Challenger discloses wherein the programming or adaptation to calculate the position of the identified wireless device includes programming or adaptation to perform the steps comprising of:

- (i) sensing the identified wireless device (paragraph [0026]);
- (ii) storing RF signal characteristics in the system data store based upon the sensing (Challenger: paragraph [0027]); and
- (iii) dynamically selecting one or more additional sensors to improve tracking performance (paragraphs [0026]-[0029]).

Regarding claim 15, in the obvious combination, Challenger discloses wherein the calculated position is output to a user or to a computer system (Fig. 3; last step; note that the

calculated position is retrieved by IT management; thus outputted to a user or to a computer system).

Regarding claim 16, in the obvious combination, Challenger discloses wherein the one or more processing elements of the system processor are further programmed or adapted to perform the step comprising of (f) storing the calculated position in the system data store (Fig. 3, last step; note the “stored determined location and identity”).

Regarding claim 19, Challenger discloses a method for tracking location of a wireless device, the method comprising the steps of:

- (a) detecting a wireless device (Fig. 3; paragraphs [0026]-[0027]);
- (b) adding an indicator associated with the detected wireless device to a list of wireless devices (Fig. 3; paragraphs [0026]-[0027])
- (c) selecting a wireless device for tracking based upon the list of wireless devices (Fig. 3; paragraphs [0026]-[0027]);
- (d) receiving data from one or more wireless receivers (paragraphs [0026]-[0029]; note the workstations, wireless access points, and monitoring stations)
- (e) calculating a position of the selected wireless device based upon the received data (Fig. 3; paragraphs [0026]-[0029])
- (f) outputting the calculated position (Fig. 3, last step; note that the stored determined location and identity are retrieved by IT management; thus, outputted;
- (g) repeating steps (a) and (b) upon occurrence of an event or at periodic intervals (paragraphs [0025] and [0030]);

(h) repeating steps (c) through (f) upon occurrence of an event or at periodic intervals (paragraphs [0025] and [0030]).

Challener fail to specifically disclose detecting utilizing one or more dynamic operational and security assessments, wherein the one or more dynamic operational and security assessments detect the wireless device responsive to behavior of the wireless device, and wherein the dynamic operational and security assessments comprise signature-based tests, protocol-based tests, anomaly-based tests, and policy deviation-based tests.

However, in the same field of endeavor, Zuk discloses detecting utilizing one or more dynamic operational and security assessments (Fig. 13; paragraphs [0111], [0113]-[0115]), wherein the one or more dynamic operational and security assessments detect the wireless device responsive to behavior of the wireless device (paragraphs [0046], [0052], [0111], [0113]-0115]), and wherein the dynamic operational and security assessments comprise signature-based tests (Fig. 13; paragraphs [0029], [0102]-[0103], [0114]), protocol-based tests (Fig. 13; paragraphs [0029], [0032], [0100], [0113]), anomaly-based tests (Fig. 13; paragraphs [0111], [0115]), and policy deviation-based tests (Fig. 13; paragraphs [0032], [0054], [0075], [0081], [0117]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to detect the wireless of Challener utilizing one or more dynamic operational and security assessments, wherein the one or more dynamic operational and security assessments detect the wireless device responsive to behavior of the wireless device, and wherein the dynamic operational and security assessments comprise signature-based tests, protocol-based tests, anomaly-based tests, and policy deviation-based tests as suggested by Zuk for the advantages of accurately and comprehensively detecting and preventing network security

breaches by integrating multiple methods of security detection (Zuk: Abstract; paragraphs [0042], [0044], [0046], [0056]).

Regarding claim 20, Challenger in combination with Zuk disclose one or more computer readable media storing instruction that upon execution by a system processor cause the system processor to perform the method of claim 19 (Challenger: Fig. 4; paragraph [0031]; see rationale as previously discussed above for claim 19).

Regarding claim 21, Challenger discloses a system for tracking location of a wireless device, the system comprising:

storing means for storing indicators of one or more wireless devices to track (paragraph [0027]);

rogue detection means for receiving scan data from one or more wireless receivers (paragraphs [0026]-[0029]), for detecting a wireless device based upon the received scan data (paragraphs [0026]-[0029]) and for storing an indicator of the detected wireless device (Fig. 3; paragraphs [0026]-[0029]); and

position determining means for selecting a wireless device to track from the indicators in the storing means (Fig. 3; paragraphs [0026]-[0029]), receiving scan data from one or more wireless receivers (Fig. 3; paragraphs [0026]-[0029]), estimating the position of the selected wireless device based upon received scan data (Fig. 3; paragraphs [0026]-[0029]) and outputting the estimated position (Fig. 3, last step; note that the stored determined location and identity are retrieved by IT management; thus, outputted).

Challenger fail to specifically disclose the storing means for storing one or more tracking criteria and the rogue detection means for detecting based upon one or more dynamic operational

and security assessments operable to detect the wireless device based on behavior, wherein the assessments are performed on the received scan data;

wherein the dynamic operational and security assessments comprise signature-based tests, protocol-based tests, anomaly-based tests, and policy deviation-based tests.

Note, however, that Challenger discloses monitoring during normal business hours (paragraph [0025]); thus, suggesting tracking criteria.

Nonetheless, in the same field of endeavor, Zuk discloses the storing means for storing one or more tracking criteria paragraph ([0081], [0100], [0113]-[0115]) and detecting a wireless device based upon one or more dynamic operational and security assessments operable to detect the wireless device based on behavior (Fig. 13; paragraphs [0046], [0052], [0111], [0113]-[0115]), wherein the assessments are performed on the received scan data (Fig. 13; paragraphs [0046], [0052], [0111], [0113]-[0115]), wherein the dynamic operational and security assessments comprise signature-based tests (Fig. 13; paragraphs [0029], [0102]-[0103], [0114]), protocol-based tests (Fig. 13; paragraphs [0029], [0032], [0100], [0113]), anomaly-based tests (Fig. 13; paragraphs [0111], [0115]), and policy deviation-based tests (Fig. 13; paragraphs [0032], [0054], [0075], [0081], [0117]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to store in the storing means of Challenger one or more tracking criteria and detecting based upon one or more dynamic operational and security assessments operable to detect the wireless device based on behavior, wherein the assessments are performed on the received scan data, wherein the dynamic operational and security assessments comprise signature-based tests, protocol-based tests, anomaly-based tests, and policy deviation-based tests

as suggested by Zuk for the advantages of accurately and comprehensively detecting and preventing network security breaches by integrating multiple methods of security detection (Zuk: Abstract; paragraphs [0042], [0044], [0046], [0056]).

5. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Challener in combination with Zuk, as applied to claim 1 above, and further in view of Won et al. (hereinafter "Won"; Patent No.: US 6,754,488).

Regarding claim 13, Challener in combination with Zuk disclose the method of claim 1 (see above), but fail to specifically disclose wherein the programming or adaptation to output the calculated position includes programming or adaptation to perform the steps comprising of formatting the calculated position according to one or more output preferences. Note, however, that at the time of invention by application, output information was notoriously well known in the art to be formatted in order to meet/satisfy the needs/requirements of the receiver.

Nonetheless, in the same field of endeavor, Won discloses wherein the programming or adaptation to output the calculated position includes programming or adaptation to perform the steps comprising of formatting the calculated position according to one or more output preferences (col. 5, lines 23-26; col. 6, lines 36-39; note that visual or audible notification is outputted; thus, the output position is inherently formatted).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to format the calculated position of Challener in combination with Zuk according to one or more output preferences as suggested by Won for the advantages of properly outputting the information and/or meeting the requirements of a receiver and is user-friendlier.

Regarding claim 14, in the obvious combination, Won discloses wherein the calculated position for output is formatted as an e-mail, a web page, a facsimile, a graphic, an XML page, an SNMP message, a page, or combinations thereof (col. 5, lines 23-26; col. 6, lines 36-39). Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to format the calculated position of Challenger in combination with Zuk as an e-mail, a web page, a facsimile, a graphic, an XML page, an SNMP message, a page, or combinations thereof as suggested by Won for the advantages of distributing the information in widely available applications that are user-friendly and easily adoptable to the users.

6. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Challenger and Zuk as applied to claim 1 above, and further in view of Ammon et al. (hereinafter "Ammon"; cited in IDS).

Regarding claim 17, Challenger in combination with Zuk disclose the system of claim 1 (see above), but fails to specifically disclose wherein the one or more processing elements of the system processor are further programmed or adapted to perform the step comprising of (f) removing an indicator of a wireless device from the system data store.

However, in the same field of endeavor, Ammon discloses wherein the one or more processing elements of the system processor are further programmed or adapted to perform the step comprising of (f) removing an indicator of a wireless device from the system data store (paragraphs [0106]-[0111]; note the active flag).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to remove the indicator of the wireless device from the system data store

Art Unit: 2617

as suggested by Ammon for the advantages of keeping the most-up-to date information and avoiding filling the data store with duplicate, redundant, and/or unnecessary information.

Regarding claim 18, in the obvious combination, Ammon discloses wherein indicator removal is based upon manual deletion, time deletion, or a change in device security status from unauthorized to authorized (paragraphs [0106]-[0111]; note the active flag).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to base the indicator removal upon manual deletion, time deletion, or a change in device security status from unauthorized to authorized as suggested by Ammon for the advantages of keeping the most-up-to date information and avoiding filling the data store with duplicate, redundant, and/or unnecessary information.

Conclusion

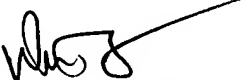
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571) 272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSC 10/24/07

MSC


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600